

Application No.: 10/774,344
Filing Date: February 6, 2004

Amendments to the Specification:

Please replace paragraph [0006] with the following amended paragraph:

[0006] Girot and Boschetti (~~U.S. Pat. No. 5,559,453~~) (U.S. Pat. No. 5,599,453) disclose modified porous supports for chromatography biomolecules. The support is prepared by use of a passivation mixture, comprising a main monomer, a passivating monomer, and a cross linking agent, which mixture upon polymerization results in the substantial elimination of the undesirable nonspecific interaction with biomolecules. The matrix is prepared by first adsorption of various bifunctional compounds to the support surface. The bifunctional molecules, called the passivating monomers, adsorb by virtue of charge interactions and/or hydrogen binding to the silanol surface of the porous support. The passivating monomers include diethylaminoethyl methacrylamide and methacrylamidopropyl trimethyl ammonium chloride, which are cationic at pH>7.0, and will form ion pairs with the deprotonated silanol surface. The result of adsorbing the passivating monomer, is that the surface becomes coated with the passivating monomer and the copolymerizable vinyl group of the molecule is oriented toward the solution in contact with the surface. The polymerization mixture, containing a functional monomer, a crosslinking agent, an initiator, and a ~~poragen~~ porogen is then permitted to polymerize in the pore of the support to form a highly crosslinked gel structure, or the so-called gel in a shell. It is probable that the passivating monomer copolymerizes with the other monomers provided, resulting a covalent bonds between the passivating layer and the support. The porogen is necessary to provide pores or channels for solution and analyte molecules to flow through the gel at an acceptable pressure differential and velocity. After completion of the polymerization, the support is washed to remove unreacted monomers and porogen.

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Please add the following new section after paragraph [0008] under the
SUMMARY OF THE INVENTION:

BRIEF DESCRIPTION OF THE DRAWINGS

- [0008.1] FIG. 1 depicts the formation of polybutadiene silica.
- [0008.2] FIG. 2 depicts the polymerization of acrocin onto polybutadiene silica.
- [0008.3] FIG. 3 depicts the addition of pentaethylene hexamine to polyacrocin silica.